

Service Manual

Radio

4-BAND PORTABLE RADIO
WITH CASSETTE TAPE RECORDER

Original

R-5410B



■ SPECIFICATIONS

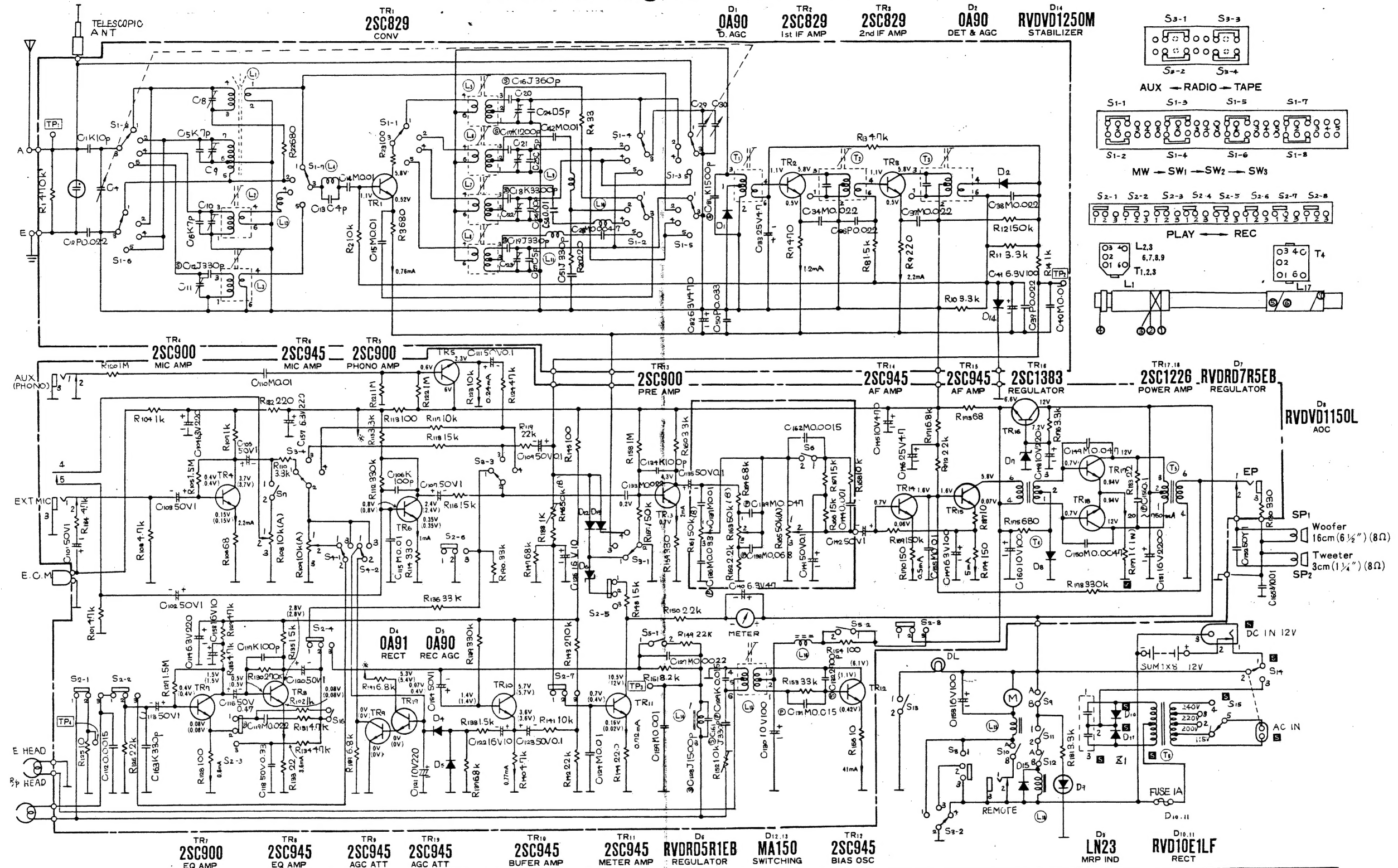
Frequency Range:	MW 520~1610 kHz (577~186m)	Power Consumption:	15 Watt (AC Only)
	SW ₁ 1.6~4.5 MHz (187~66.7m)	Speakers:	Woofer 16 cm (6½") PM Dynamic Speaker
	SW ₂ 4.5~12 MHz (66.7~25m)		Tweeter 3 cm (1½") PM Dynamic Speaker
	SW ₃ 12~26.1 MHz (25~11.5m)	Dimensions:	406(Wide) x 241(High) x 105(Deep) mm (16" x 9½" x 4¼")
Intermediate Frequency:	AM 455 kHz	Weight:	4.3 kg (9 lb. 8 oz.) without batteries
Sensitivity:	MW 50μV/m for 50mW Output	Impedance:	Speaker 8Ω
	SW ₁ 20μV/m for 50mW Output		Earphone Jack 8Ω
	SW ₂ 5μV for 50mW Output		Aux Jack 1MΩ
	SW ₃ 5μV for 50mW Output		Microphone Jack 47kΩ
Power Output:	6.5W Maximum		
Power Source:	AC 115/200/220/240V 50/60 Hz, 12V (Eight "D" Size Flashlight Batteries) (National UM-1 or equivalent)		

Specifications are subject to change without notice for further improvement.

National Panasonic

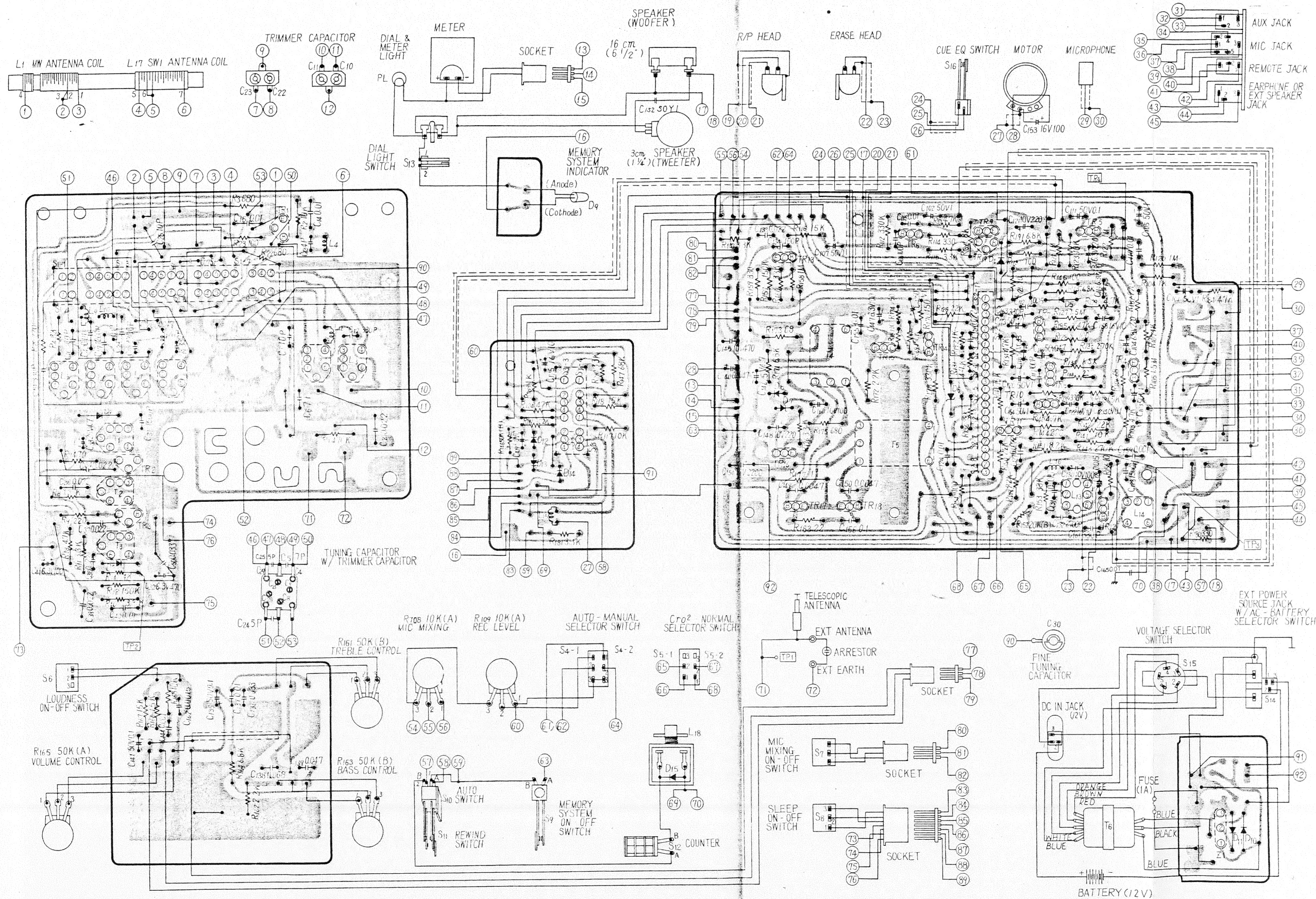
Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

Schematic Diagram—Model R-5410B



- Notes:**
1. S₁₋₁~S₁₋₈: Band selector in "MW" position.
 2. S₂₋₁~S₂₋₈: Recording-play selector in "Play" position.
 3. S₃₋₁~S₃₋₆: Radio-aux-tape selector in "Tape" position.
 4. S₄₋₁, S₄₋₂: Rec switch in "Manual" position.
 5. S₅₋₁, S₅₋₂: Tape switch in "Normal" position.
 6. S₆: Loudness switch in "OFF" position.
 7. S₇: Mic mixing switch in "OFF" position.
 8. S₈: Sleep switch in "OFF" position.
 9. S₉: Memory system switch in "OFF" position.
 10. S₁₀: Auto switch in "OFF" position.
 11. S₁₁: Rewind switch in "OFF" position.
 12. S₁₂: Counter switch in "OFF" position.
 13. S₁₃: Dial light switch in "OFF" position.
 14. S₁₄: AC-battery selector in "Battery" position.
 15. S₁₅: Voltage selector in "115V" position.
 16. S₁₆: Cue EQ switch in "OFF" position.
 17. DC voltage measurements are taken with circuit tester 10ka/V from negative terminal of battery.
().....Recording position
 18. Battery current. No signal..... 70mA
Maximum output940mA

Circuit Board Wiring View-Model R-5410B



TR ₁		TR ₁₀	
C	5.8V	Recording	
B	1.1V	C	5.7V
E	0.52V	B	1.4V
I _e	0.76mA	E	3.6V
		I _e	0.77mA

TR ₂		TR ₁₁	
C	5.8V	Recording	
B	1.1V	C	10.5V
E	0.5V	B	1.2V
I _e	1.2mA	E	0.16V
		I _e	0.72mA

TR ₃		TR ₁₂	
C	5.8V	Recording	
B	1.1V	C	6.1V
E	0.5V	B	1.1V
I _e	2.2mA	E	0.42V
		I _e	4.1mA

TR ₄		TR ₁₃	
Recording		C	1.3V
C	3.7V	B	0.2V
B	0.4V	E	0.7V
E	0.15V	I _e	2mA
I _e	2.2mA		

TR ₅		TR ₁₄	
C	6V	C	1.6V
B	0.6V	B	0.7V
E	2.3V	E	0.06V
I _e	0.24mA	I _e	0.5mA

TR ₆		TR ₁₅	
Recording		C	1.8V
C	2.4V	B	1.6V
B	0.8V	E	0.07V
E	0.35V	I _e	5mA
I _e	1mA		

TR ₇		TR ₁₆	
Recording		C	12V
C	1.5V	B	1.2V
B	0.4V	E	1.6V
E	0.08V		
I _e	0.8mA		

TR ₈		TR _{17, 18}	
Recording		C	12V
C	2.8V	B	0.7V
B	0.5V	E	1.04V
E	0.08V	I _e	50mA
I _e	3.6mA		

TR ₉		TR ₁₉	
Recording		C	0.3V
C	0V	B	0.37V
B	0V	E	0.4V
E	0V	I _e	0V

TR ₁₉		TR ₂₀	
Recording		C	0.3V
C	0.3V	B	0.37V
B	0.37V	E	0.4V
E	0V	I _e	0V

TR&D	TR2 TR3 D1 D2	TR1	D12 D13 D14 D9	D15	TR13 D7 D8 TR4 TR7 TR18	TR15 TR6	TR14 D6	TR9 TR9 D4 TR11 TR7 TR10 D5	TR12	TR5 TR4	D11 D10
T&L	L1 L5 L6 L7 L9 L10 L8 L17 L11 T1 T2 T3	L2 L3 L12 L4	L15	L18	T4	T5	L16	L13	L14	T6	

CONFIDENTIAL

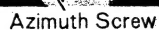
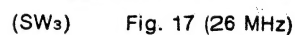
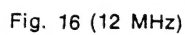
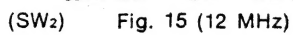
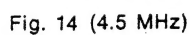
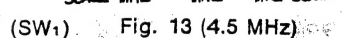
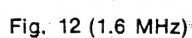
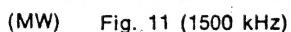
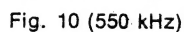
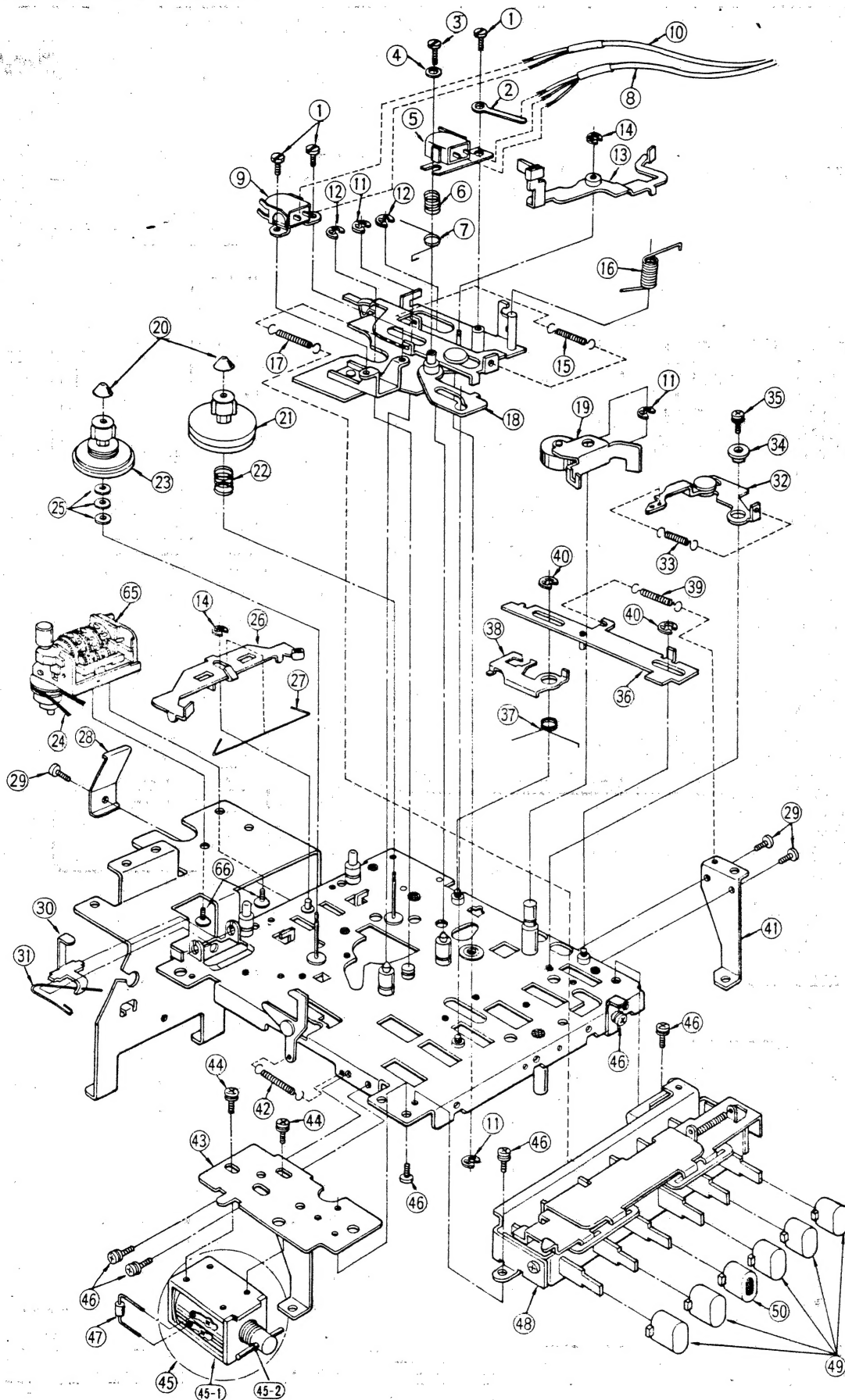


Fig. 18

MECHANISM PARTS LOCATIONS—TAPE DECK



3	10
4	1
5	8
1	2
11	14
6	13
12	
12	
7	16
20	15
17	11
21	35
22	19
23	18
25	34
	32
65	40
14	33
26	39
	40
27	38
28	36
24	37
29	
	29
66	
30	41
31	
	46
	46
44	
42	11
44	46
43	46
	46
46	
47	50
45	48
45-1	
45-2	49

Fig. 19 (Top View)

MECHANISM PARTS LOCATIONS—TAPE DECK

R-5410B

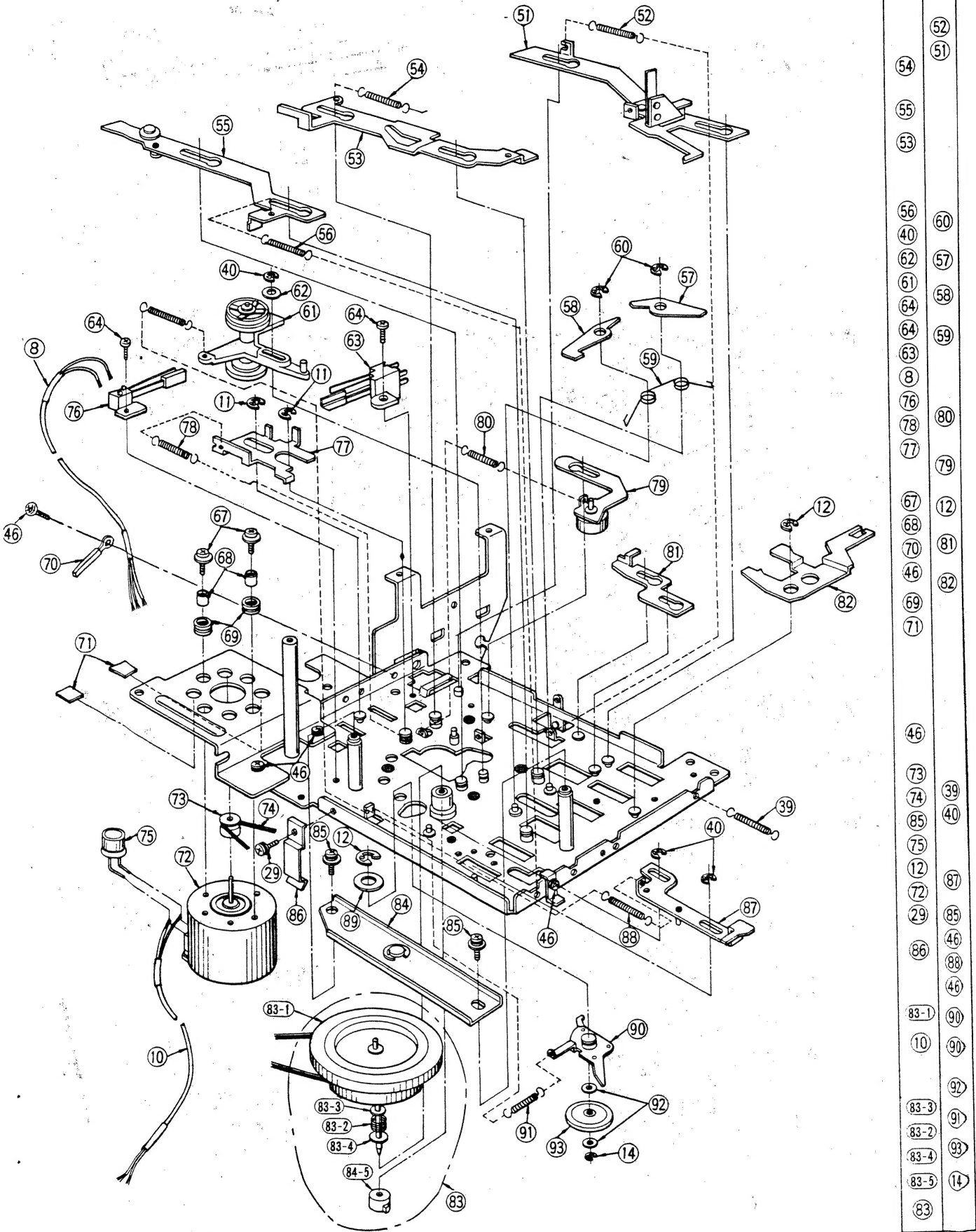


Fig. 20 (Rear View)

■ CABINET PARTS LOCATION

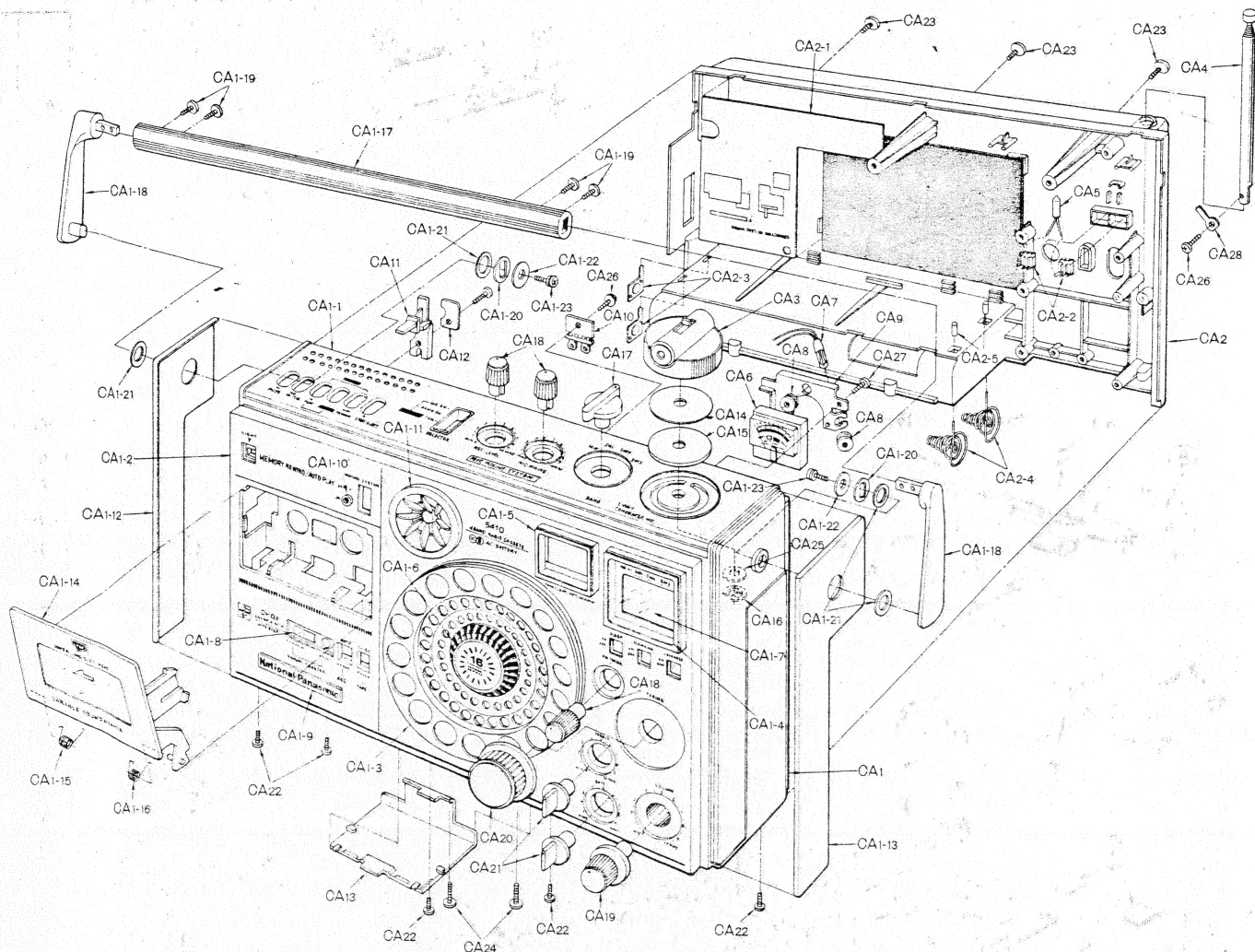


Fig. 21

■ CHASSIS PARTS LOCATION

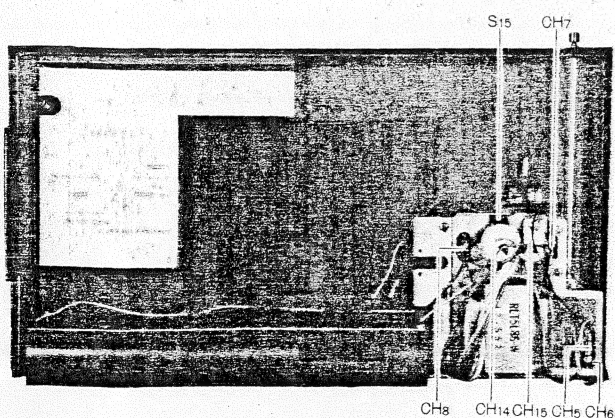


Fig. 22

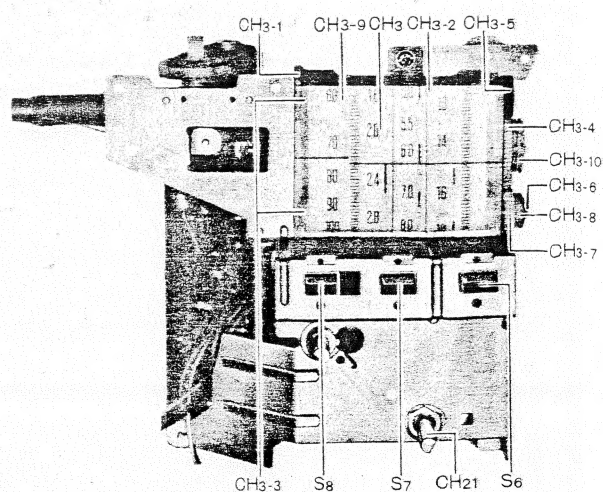


Fig. 23

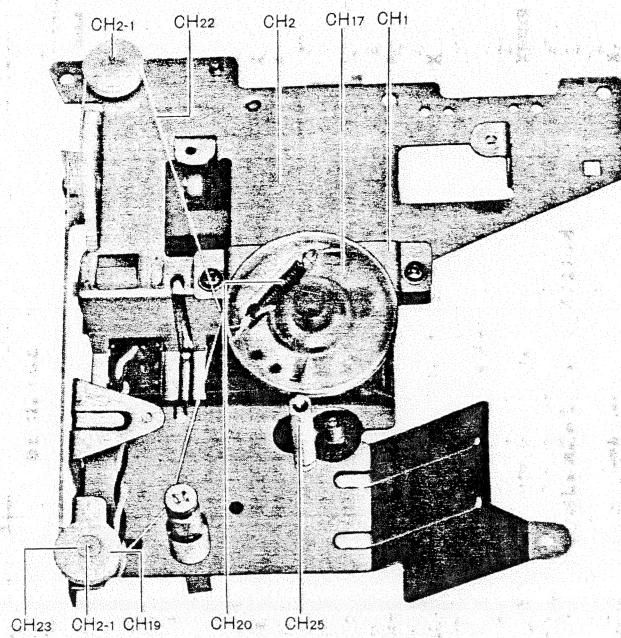


Fig. 24

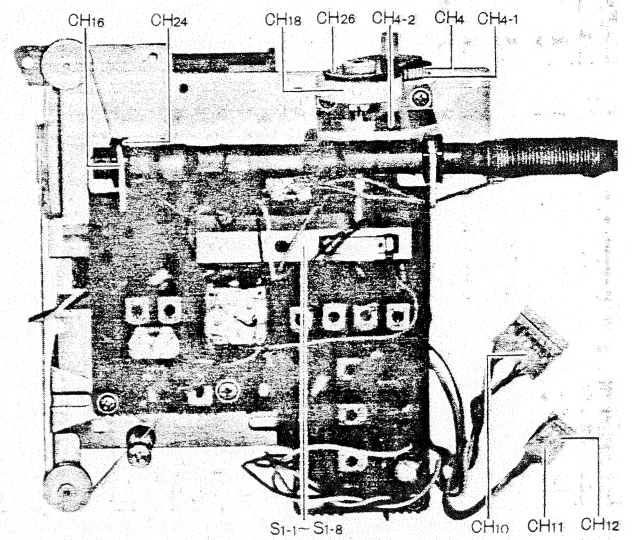


Fig. 25

■ ACCESSORIES AND PACKING MATERIALS

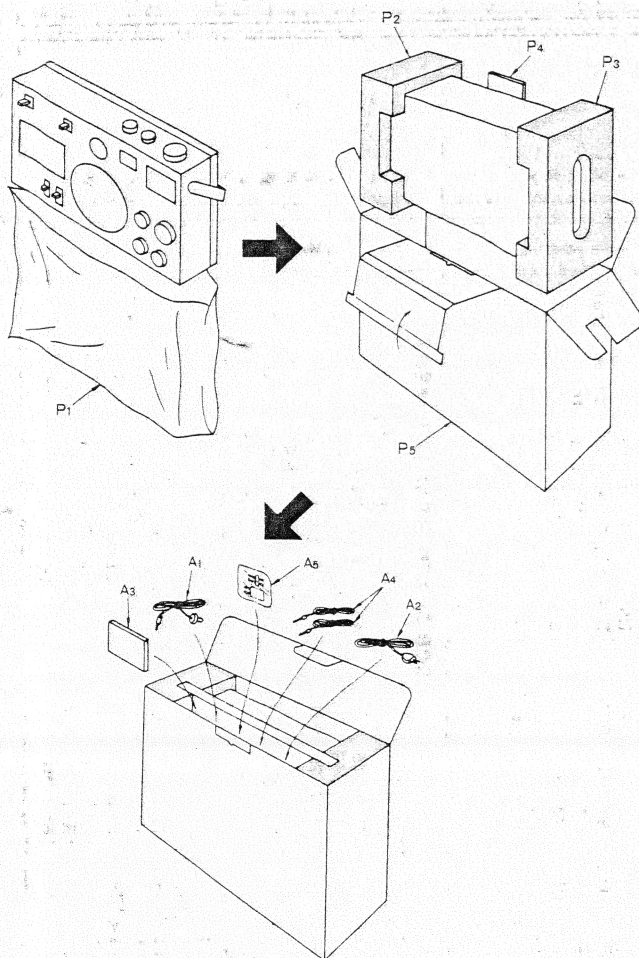


Fig. 27

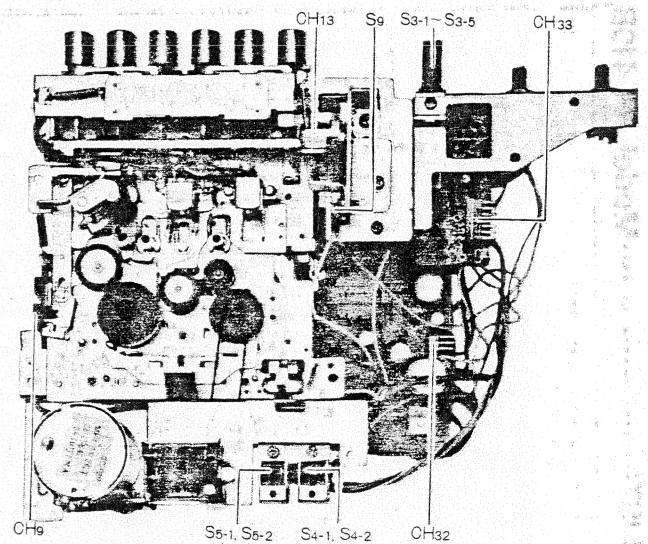


Fig. 26

REPLACEMENT PARTS LIST.....Model R-5410B

NOTES: 1.Part numbers are indicated on most mechanical parts.
Please use this part number for parts orders.
2.X-Z rank: X rank parts will cover 80% of repair needs.
X+Y rank parts will cover 95% of repair needs.
Z rank parts are less necessary.
3. **SAFETY** Indicates that only parts specified by the manufacturer be used for replacement in critical circuits.

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
TRANSISTORS AND DIODES				
TR1,2,3	2SC829	Transistor(Si), Converter, 1st IF Amplifier, 2nd IF Amplifier	3	X
TR4,5,7,13	2SC900	Transistor(Si), MIC 1st Amplifier, PHONO(AUX) Amplifier, Equalizer, 1st Amplifier, PRE Amplifier	4	X
TR6,8,9,10,11,12,14,15,19	2SC945	Transistor(Si), MIC 2nd Amplifier, Equalizer 2nd Amplifier, AGC ATT Buffer Amplifier, Meter Amplifier, Bias Oscillator, AM 1st Amplifier, AF 2nd Amplifier, Regulator, AGC 1st Amplifier	9	X
TR16	2SC1383	Transistor(Si), Regulator	1	X
TR17,18	2SC1226	Transistor(Si), Power Amplifier	2	X
D1,2,5	OA90	Diode(Ge), AM Detector & AGC, AM D.AGC, REC AGC	3	X
D4	OA91	Diode(Ge), Rectifier AGC	1	X
D6	RVDRD5R1EB	Diode(Si), Regulator	1	X
D7	RVDRD7R5EB	Diode(Si), Regulator	1	X
D8	RVDVD1150L	Diode(Si), Operation Compensator	1	X
D9	LN23	Diode(Si), MRP Indicator	1	X
D12,13	MA150	Diode(Si), Switching	2	X
D14	RVDVD1250M	Diode(Si), Stabilizer	1	X
D10,11	RVD10E1LF	Diode(Si), Rectifier	2	X SAFETY
COILS AND TRANSFORMERS				
L1,17	RLF5F72-O	Antenna Coil, MW, SW1	1	X
L2	RLA3M5	Antenna Coil, SW2	1	X
L3	RLA3M6	Antenna Coil, SW3	1	X
L4,9	RLQY7S5-O	Coil, Choke	2	Y
L5	RLO2M6	Oscillator Coil, MW	1	X
L6	RLO3M6	Oscillator Coil, SW1	1	X
L7	RLO3M7	Oscillator Coil, SW2	1	X
L8	RLO3M8	Oscillator Coil, SW3	1	X
L10	RLQY10G5-O	Coil, Choke	1	Y
L11	RLQY15S5-O	Coil, Choke	1	Y
L12	RLQY50S5-O	Coil, Choke	1	Y
L13	RLO9C16-K	Oscillator Coil	1	OX
L14	RLE5001-K	Coil, Trap	1	OY
L15	RLQX101-1Y	Coil, Choke	1	Y
L16	RLQZ102-1-Q	Coil, Choke	1	Y
T1	RLI2M203	IFT, 1st	1	X

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
T2	RLI2M205	IFT, 2nd	1	X
T3	RLI2M402	IFT, 3rd	1	X
T4	RLT3G30-V	Input Transformer, P=1.4KΩ, S=1.4KΩ	1	X
T5	RLT2I15-W	Output Transformer, P=50Ω, S=8Ω	1	OX
T6	RLT5L86-W	Power Transformer	1	OX SAFETY
VARIABLE RESISTORS				
R108,109	EVH60AF15A14	Variable Resistor, 10KΩ(A), Rec Level & Mic Mixing Control	2	OX
R161,163	EVH0XAF15B54	Variable Resistor, 50KΩ(B), Treble & Bass Control	2	OX
R165	EVH0XAF15A54	Variable Resistor, 50KΩ(A), Volume Control	1	OX
R146	EVLTA4AA00B54	Semi-Fixed Variable Resistor, 50KΩ(B), Meter Control	1	X
R152	EVLTA4AA00B24	Semi-Fixed Variable Resistor, 20KΩ(B), Rec Bias Control	1	X
VARIABLE CAPACITORS				
C4,29	PVC2K20T1L	Tuning Capacitor, W/Trimmer Capacitor(C8,9,20,21)	1	X
C30	RCVFT1-19-4	Fine Tuning Capacitor	1	OX
C10,11,22,23	RCV2T-16M	Trimmer Capacitor	2	X
COMPONENT COMBINATION				
Z1	RXAF103P22HD	Coils & Capacitors	1	X SAFETY
SPEAKERS				
SP1	EAS3KH01SB	Tweeter, 3cm(1 1/4") PM Dynamic Speaker, Imp.8Ω	1	OX
SP2	EAS16P48SA	Woofer, 16cm(6 1/2") PM Dynamic Speaker, Imp.8Ω	1	OX
SWITCHES				
S1-1~S1-8	RSR87ZK-A	Switch, Band	1	X
S2-1~S2-8	RSH65Z-P	Switch, Recording-Play	1	X
S3-1~S3-5	RST30ZS-H	Switch, Radio-Aux-Tape	1	OX
S4-1,S4-2	RST68Z-H	Switch, Rec & Tape	2	OX
S5-1,S5-2				
S6,S7,S8	RSS43E	Switch, Loudness, Mic Mixing & Sleep	3	X
S9	RSH43Z-H	Switch, Memory System	1	X
S13	RSH61A	Switch, Dial Light	1	X
S15	ESE-3715	Switch, Voltage Selector	1	OX SAFETY
RESISTORS				
R174	ERD18VJ151	150Ω, 1/8Watt, ±5%, Carbon	1	Z

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R187	ERD18VJ100	10Ω, 1/4Watt, ±5%, Carbon	1	Z
R125	ERD18SJ100	10Ω, 1/4Watt, ±5%, Carbon	1	Z
R133,183	ERD18SJ220	22Ω, 1/4Watt, ±5%, Carbon	2	Z
R4	ERD18SJ330	33Ω, 1/4Watt, ±5%, Carbon	1	Z
R106,173	ERD18SJ680	68Ω, 1/4Watt, ±5%, Carbon	2	Z
R113,128,145	ERD18SJ101	100Ω, 1/4Watt, ±5%, Carbon	4	Z
154				
R170	ERD18SJ151	150Ω, 1/4Watt, ±5%, Carbon	1	Z
R9,144,182	ERD18SJ221	220Ω, 1/4Watt, ±5%, Carbon	3	Z
R114,159	ERD18SJ331	330Ω, 1/4Watt, ±5%, Carbon	2	Z
R7	ERD18SJ471	470Ω, 1/4Watt, ±5%, Carbon	1	Z
R3,175	ERD18SJ681	680Ω, 1/4Watt, ±5%, Carbon	2	Z
R14,104,107,188	ERD18SJ102	1KΩ, 1/4Watt, ±5%, Carbon	4	Z
R8,135,138	ERD18SJ152	1.5KΩ, 1/4Watt, ±5%, Carbon	3	Z
R150,162,172	ERD18SJ222	2.2KΩ, 1/4Watt, ±5%, Carbon	3	Z
R10,11,110,115,160,176	ERD18SJ332	3.3KΩ, 1/4Watt, ±5%, Carbon	7	Z
181				
R13,101,103,129,140,184	ERD18SJ472	4.7KΩ, 1/4Watt, ±5%, Carbon	7	Z
185				
R137,164,171	ERD18SJ682	6.8KΩ, 1/4Watt, ±5%, Carbon	5	Z
189,191				
R2,117,123,141,168	ERD18SJ103	10KΩ, 1/4Watt, ±5%, Carbon	5	Z
R116,118,148	ERD18SJ153	15KΩ, 1/4Watt, ±5%, Carbon	5	Z
166,167				
R119,126,142	ERD18SJ223	22KΩ, 1/4Watt, ±5%, Carbon	4	Z
149				
R136,153	ERD18SJ333	33KΩ, 1/4Watt, ±5%, Carbon	2	Z
R124,134	ERD18SJ473	47KΩ, 1/4Watt, ±5%, Carbon	2	Z
R147	ERD18SJ683	68KΩ, 1/4Watt, ±5%, Carbon	1	Z
R12,157,169	ERD18SJ154	150KΩ, 1/4Watt, ±5%, Carbon	3	Z
R112,139,178	ERD18SJ334	330KΩ, 1/4Watt, ±5%, Carbon	3	Z
R1	ERD18SJ474	470KΩ, 1/4Watt, ±5%, Carbon	1	Z
R120,121,122	ERD18SJ105	1MΩ, 1/4Watt, ±5%, Carbon	4	Z
158				
R105,127	ERD18SJ155	1.5MΩ, 1/4Watt, ±5%, Carbon	2	Z
R192	ERD18SJ102	1KΩ, 1/4Watt, ±5%, Carbon	1	Z
R130,143	ERD18SJ274	270KΩ, 1/4Watt, ±5%, Carbon	2	Z
R151	ERD18SJ822	8.2KΩ, 1/4Watt, ±5%, Carbon	1	Z
R131	ERD18VJ472	4.7KΩ, 1/4Watt, ±5%, Carbon	1	Z
R20	ERD18TJ221	220Ω, 1/4Watt, ±5%, Carbon	1	Z
R190	ERD18VJ333	33KΩ, 1/4Watt, ±5%, Carbon	1	Z
R180	ERC12GM331	330Ω, 1/2Watt, ±20%, Solid	1	Z
R23	ERD18TJ101	100Ω, 1/4Watt, ±5%, Carbon	1	Z
R22	ERD18TJ681	680Ω, 1/4Watt, ±5%, Carbon	1	Z
R177	BRX1ANJ1ROU	1.0Ω, 1Watt, ±5%, Metal Oxide	1	Z
R156	ERD18TJ100	10Ω, 1/4Watt, ±5%, Carbon	1	Z
CAPACITORS				
G13	EGCD1H040C	4PF, 50WV, ±0.25PF, Ceramic	1	Z

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C24,25,27	ECOD1H050C	5PF, 50WV, ±0.25PF, Ceramic	3	Z
C5,6	ECOD1H070DC	7PF, 50WV, ±0.25PF, Ceramic	2	Z
C1,26	ECOD1H100KC	10PF, 50WV, ±10%, Ceramic	2	Z
C163	ECOD1H331K	330PF, 50WV, ±10%, Ceramic	1	Z
C2,36,39	ECKE1H223PF	0.022μF, 50WV, ±10%, Ceramic	3	Z
C50	ECKE1H333PF	0.033μF, 50WV, ±10%, Ceramic	1	Z
C28,149,150	ECKE1H472MD	0.0047μF, 50WV, ±20%, Ceramic	3	Z
C14,15,40,42	ECKE1H103MD	0.01μF, 50WV, ±20%, Ceramic	11	Z
54,110,115,124,137,155				
165				
C34,37,119,133	ECKE1H223MD	0.022μF, 50WV, ±20%, Ceramic	4	Z
C106,117,134	ECCV1H101K	100PF, 50WV, ±10%, Ceramic	3	Z
C159	ECKE1H102MD	0.001μF, 50WV, ±20%, Ceramic	1	Z
C127	ECKE1H222MD	0.0022μF, 50WV, ±20%, Ceramic	1	Z
C112,162	ECKE1H152MD	0.0015μF, 50WV, ±20%, Ceramic	2	Z
C144	ECKD1H102PF	0.001μF, 50WV, ±10%, Ceramic	1	Z
C12,19,51,161	ECQS1331JZ	330PF, 125WV, ±5%, Styrol	4	Z
C16	ECQS1361JZ	360PF, 125WV, ±5%, Styrol	1	Z
C17	ECQS05122KZ	1200PF, 50WV, ±10%, Styrol	1	Z
C31,128	ECQS05152JZ	1500PF, 50WV, ±5%, Styrol	2	Z
C132	ECQS05272KZ	2700PF, 50WV, ±5%, Styrol	1	Z
C18	ECQS05332KZ	3300PF, 50WV, ±10%, Styrol	1	Z
C38	ECQG05223MZ	0.022μF, 50WV, ±20%, Polyester	1	Z
C131	ECQG05153MZ	0.015μF, 50WV, ±20%, Polyester	1	Z
C139	ECQG05473MZ	0.047μF, 50WV, ±20%, Polyester	1	Z
C156	ECQG05104MZ	0.1μF, 50WV, ±20%, Polyester	1	Z
C138	ECQG05683MZ	0.068μF, 50WV, ±20%, Polyester	1	Z
C136	ECQG05333MZ	0.033μF, 50WV, ±20%, Polyester	1	Z
C129	ECQM05153-KZ	0.015μF, 50WV, ±10%, Polyester	1	Z
C109,111,123,135,141	ECEA50ZR1E	0.1μF, 50WV, Electrolytic	5	Y
C152	ECEB50Y1	1μF, 50WV, Electrolytic	1	Y
C140	ECEA6V47E	47μF, 6.3WV, Electrolytic	1	Y
C41,147	ECEA6V100E	100μF, 6.3WV, Electrolytic	2	Y
C104,114,157	ECEA6V220E	220μF, 6.3WV, Electrolytic	3	Y
C32	ECEA6V470E	470μF, 6.3WV, Electrolytic	1	Y
C130,160	ECEA10V100E	100μF, 10WV, Electrolytic	2	Y
C121,148	ECEA10V220E	220μF, 10WV, Electrolytic	2	Y
C145	ECEA10V470E	470μF, 10WV, Electrolytic	1	Y
C122,125,158	ECEA16V10E	10μF, 16WV, Electrolytic	3	Y
C151	ECEA16V2200	2200μF, 16WV, Electrolytic	1	Y
C33,146	ECEA25V4R7E	4.7μF, 25WV, Electrolytic	2	Y
C101,102,103,105,107,113,120,154	ECEA50V1E	1μF, 50WV, Electrolytic	8	Y
C116	ECEA50ZR47E	0.47μF, 50WV, Electrolytic	1	Y
C118	ECEA50ZR33E	0.33μF, 50WV, Electrolytic	1	Y
C142	ECEA50V1	1μF, 50WV, Electrolytic	1	Y
CABINET				
CA1	RYMR5410BX	Cabinet Body Assembly	1	OX

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
CA1-1	Not Available, Order RYMR5410BX	Cabinet Body Only	(1)	
		Indicating Plate, Cabinet Upper Side	(1)	
		Escutcheon, Indicating Plate	(1)	
		Net, Speaker	(1)	
CA1-2		Escutcheon, MEMORY REWIND/	(1)	
		AUTO PLAY 5410 etc. Mark		
CA1-3		Ornament (Large), Speaker	(1)	
CA1-4		Ornament, Dial	(1)	
CA1-5		Ornament, Meter	(1)	
CA1-6		Ornament (Small), Speaker	(1)	
CA1-7		Transparent Panel, Dial	(1)	
CA1-8		Transparent Panel, Counter	(1)	
CA1-9		Emblem, National Panasonic Mark	(1)	
GA1-10		Ornament, Diode	(1)	
CA1-11		Ornament, Tweeter	1	OZ
CA1-12		Ornament, Cabinet Left Side	1	OZ
CA1-13		Ornament, Cabinet Right Side	1	OZ
CA1-14		Cassette Lid	1	OY
CA1-15		Spring (Left Side), Cassette Lid	1	OY
CA1-16		Spring (Right Side), Cassette Lid	1	OY
CA1-17		Handle Assembly	1	OX
	Not Available, Order RYHR5410BX	Handle Only	(1)	
		Shaft (Steel), Handle	(1)	
CA1-18	RKX100YS	Arm, Handle	2	Y
CA1-19	XSB3+6BNS	Screw, Handle M'tg	4	Z
CA1-20	RHM58Z	Washer, Arm M'tg	2	Z
CA1-21	RNW824Z	Washer, Arm & Microphone Assembly	4	Z
CA1-22	XWG3F10	Washer, Arm M'tg	2	Z
CA1-23	XYN3+C8S	Screw, Arm M'tg	2	Z
	Not Available, Order RYFR5410BX	Cabinet Back Cover Assembly	1	OX
CA2		Cabinet Back Cover Only	(1)	
CA2-1	RMC368Z	Shield Plate, Cabinet Back Cover	1	OZ
CA2-2	RJS71Z	Terminal, EXT. Ant & Earth	2	Y
CA2-3	RJC111A	Terminal, Battery ⊕ Side	2	Y
CA2-4	RJC505Z	Spring, Battery ⊖ Side	2	Y
CA2-5	RJT398A	Connecting Pipe, Battery Spring	2	Z
CA3	RWER5410BX	Microphone Assembly	1	OX
CA4	XEARV163HAY	Telescopic Antenna, 8 Steps, 1077mm	1	OX
CA5	XAN5T25	Neon Lamp, Arrestor, 100V, 0.3A	1	X
CA6	RSM2607WK	Meter, TUNE/LEVEL/BATT Indicator	1	OX
CA7	XAMR52T100	Pilot Lamp, Dial & Meter	1	X
CA8	RHG211	Rubber Cushion, Pilot Lamp	2	Z
CA9	RMM24Z	Bracket, Meter	1	OZ
CA10	RJR1B	Terminal Strip (2 Terminals), Speaker	1	Z
	RJS253Z-X RBC97Z RUL428Z RKK108Z	Socket (3 Terminals), PC Board	3	OZ
CA11		Button, Dial Light	1	OY
CA12		Bracket, Dial Light Button	1	OZ
CA13		Battery Cover	1	OX

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
CA14	RHG422Z	Rubber Cushion, Microphone Assembly	1	OZ
CA15	RNW452Z	Washer, Microphone Assembly	1	OZ
CA16	XUC6FW	Circlip, Microphone Assembly M'tg	1	Z
CA17	RBS83YK	Knob, Band Selector	1	OX
CA18	RBN283Y	Knob, Fine Tuning, Mic Mixing & Rec Level	3	X
CA19	RBN284Y	Knob, Volume	1	X
CA20	RBN294Z	Knob, Tuning	1	X
CA21	RBS85Y	Knob, Treble & Bass	2	OX
CA22	XTN3+10B	Screw, Cabinet Back Cover M'tg	5	Z
CA23	XTB3+12BFN	Screw, Cabinet Back Cover M'tg	3	Z
CA24	XSN3+6S	Screw, Cabinet Back Cover M'tg	2	Z
CA25	RNW824Z	Washer, Microphone	1	Z
CA26	XTN3+8B	Screw, Terminal Strip & Telescopic Ant. M'tg	2	Z
CA27	XTW3+8E	Screw, Meter Bracket M'tg	1	Z
CA28	RJT202B	Terminal, Telescopic Antenna	1	Z
CHASSIS				
CH1	RUL417Z	Bracket, Dial Drum	1	OX
CH2	RXER5410BX Not Available, Order	Chassis Assembly	1	OX
		Chassis Only	(1)	
CH2-1	RXER5410BX RYDR5410BX	Shaft, Pulley	(2)	
CH3		Dial Assembly	1	OX
CH3-1	Not Available, Order RYDR5410BX	Base (Plastic), Dial	(1)	
CH3-2		Transparent Panel, Dial	(1)	
CH3-3		Roller, Dial Scale	(2)	
CH3-4		Gear (Large), Dial	(1)	
CH3-5		Gear with Shaft, Dial (Low Frequency Side)	(1)	
CH3-6		Shaft, Gear of Dial (High Frequency Side)	(1)	
CH3-7		Gear, Dial (High Frequency Side)	(1)	
CH3-8		Spring, Gear	(1)	
CH3-9		Dial	(1)	
		Circlip, Gear M'tg	(1)	
CH3-10	RDD200Z	Drum (Small), Dial	1	Y
CH3-11 (Fig. 7)	XTW3+10E	Screw, Drum (RDD200Z) M'tg	1	Z
	XWC3B RDG9003Z	Washer, Drum (RDD200Z) M'tg	1	Z
CH4		Gear Assembly, Band Selector	1	OY
	Not Available, Order RDG9003Z	Gear Only (Plastic), Band Selector	(1)	
CH4-1		Gear Only (Steel), Band Selector	(1)	
CH4-2	XBA2C10TRO	Holder, Gear	(1)	
CH5		Fuse, 1A	1	OX SAFETY
CH6	RJF7A	Fuse Holder	2	Z SAFETY
CH7	RJJ29Z-H	Jack, EXT. Power Source (AC IN)	1	Y SAFETY
CH8	RJJ104Z-C	Jack, EXT. Power Source (DC IN 12V)	1	OY

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
CH9	RJJ105Z-C	Jack, Aux, Mic, Remote & Earphone	1	OY
CH10	RJS219Z-X	Socket (7 Terminals), Sleep Switch & PC Board	1	Z
CH11	RJS253Z-X	Socket (3 Terminals), PC Board & Mic Mixing Switch	3	OZ
CH12	RJT462Z-X	Terminal, Socket (RJS53Z-X & RJS219Z-X)	16	Z
CH13	RUB9016Z	Lever, Memory ON-OFF Switch	1	OY
	RUS80	Spring, Band Selector Gear	1	Z
	RHG845Z	Cover, Sleep, Mic Mixing, Loudness Switch	3	OZ
	RUV379Z	Cover, Rec & Tape Switch	2	Z
	RUV400Z	Cover, Memory ON-OFF & Power Radio ON, Aux ON Selector	2	OZ
	RUV401Z	Cover, Play, Eject etc. Button	1	OZ
CH14	RUV321Y	Cover, Voltage Selector	1	Z EXCESS
CH15	RUV387Z	Cover, EXT. Power Source Jack (AC)	1	Z EXCESS
CH16	RMA140Z	Bracket, Ferrite Antenna	2	OZ
CH17	RDD410Z	Drum, Dial	1	Y
CH18	RDG5642Z	Gear, Band Selector	1	OY
CH19	RDR23	Pulley, Dial	2	Y
CH20	RDS4090A	Spring, Dial	1	Z
CH21	RDT2273Z	Shaft, Tuning	1	OY
CH22	RDZ05A	Cord (500m), Dial	1 Roll	Y
CH23	RNW150-2	Washer, Pulley	3	Y
	RHG5A	Rubber Cushion, Tuning Capacitor	1	Z
CH24	RHG109	Rubber Cushion, Ferrite Antenna	2	Z
	RHG707Z	Rubber Cushion, PC Board (RF Circuit)	1	Z
CH25	RHD3100AS	Stay Shaft, PC Board (RF Circuit)	1	Z
CH26	RHR788	Holder, Band Selector Gear	1	OZ
CH27 (Fig.2)	XTN3+10BR	Red Screw, Chassis M'tg	9	Z
	XSN2+4	Screw, Sleep, Mic Mixing & Loudness Switch M'tg	3	Z
	XSN2+W6	Screw, Memory ON-OFF Switch M'tg	1	Z
	XSN2+6	Screw, EXT. Power Source Jack (DC IN) M'tg	2	Z
	XSN26+6	Screw, Tuning Capacitor M'tg	2	Z
	XNS8	Nut, Tuning Shaft, Rec Level & Mic Mixing M'tg	4	Z
	XNG3CS	Nut, Stay Shaft M'tg	1	Z
	XWA3B	Washer, Stay Shaft M'tg	1	Z
	XWV8	Washer, Tuning Shaft, Rec Level & Mic Mixing M'tg	3	Z
	RUL424Z	Bracket, Transformer	1	OZ
CH28 (Fig.3)	XYN3+F6S	Screw, PC Board M'tg	2	Z
CH29 (Fig.3)	XTN3+8F	Screw, PC Board M'tg	1	Z
CH30 (Fig.4)	XTW3+6L	Screw, PC Board & Band Selector Gear M'tg	6	Z
CH31 (Fig.3)	XTW3+8L	Screw, PC Board M'tg	5	Z
CH32	RJP133Z	Plug (3 Pins), Socket (RJS253Z-X)	3	OZ
CH33	RJF135Z	Plug (7 Pins), Socket (RJS219Z-X)	1	OZ
CH34 (Fig.4)	XYN3+F8S	Screw, PC Board (RF Circuit) M'tg	1	Z

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
ACCESSORIES				
A1	XEAH1A1-P	Earphone, Impedance 8Ω	1	Y
A2	RJA21C	Power Cord, AC	1	Y EXCESS
A3	RJN13Z	Cassette Tape	1	Y
A4	RJP44	Plug, EXT. Ant. & Earth	2	Y
A5	RJP120ZS-H	Plug, Power Source	1	Y EXCESS
PACKING MATERIALS				
P1	RPP176Z	Polyethylene Cover	1	Z
P2	RPN9177Z	Pad Complete	1	OZ
	[Not Available, Order	Pad, Left Side	(1)	
P3	RPN9177Z	Pad, Right Side	(1)	
P4	RQX5929Z	Instruction Book	1	OY
P5	RPK380Z	Gift Box	1	OZ
TAPE DECK				
1	RMQ296A	Screw, Erase, R/P Head M'tg	3	Z
2	RMQ117A	Lug Terminal, R/P Head Lead	1	Z
3	RMQ643Z	Screw, R/P Head M'tg (Azimuth Adjustment)	1	OY
4	RMQ298A	Washer, R/P Head M'tg	1	Z
5	RJH16Z	R/P Head with Plate	1	OX
6	RMQ116A	Spring, R/P Head M'tg	1	Y
7	RMQ644Z	Spring, R/P Head M'tg	1	OY
8	RMQ645Z	Lead Wire, R/P Head & Leaf Switch	1	OY
9	RJH17Z	Erase Head	1	OX
10	RMQ646Z	Lead Wire, Erase Head & DC Motor	2	OY
11	XUC3FW	E Ring, Head Base Assembly & etc. M'tg	5	Z
12	XUC4FW	E Ring, Head Base Assembly & Idler Assembly etc. M'tg	4	Z
13	RMQ510Z	Lever Assembly, Auto-Stop Sensing	1	Y
14	XUC15FW	E Ring, Auto-Stop Sensing Lever Assembly, Brake Arm Assembly & Idler M'tg	3	Z
15	RMQ647Z	Spring, Head Base Assembly	1	OY
16	RMQ648Z	Spring, Pinch Roller	1	OY
17	RMQ649Z	Spring, Head Base Assembly	1	OY
18	RMQ650Z	Head Base Assembly	1	OY
19	RMQ539Z	Pinch Roller Assembly	1	OX
20	RMQ401A	Cap, Reel Table	2	Z
21	RMQ651Z	Takeup Reel Table Assembly	1	OY
22	RMQ652Z	Spring, Takeup Reel Table Assembly	1	OY
23	RMQ653Z	Supply Reel Table Assembly	1	OY
24	RMQ654Z	Belt, Teap Counter	1	OX
25	RMQ655Z	Washer, Supply Reel Table Assembly	3	OZ
26	RMQ299A	Brake Arm Assembly	1	Y
27	RMQ302A	Spring, Brake Arm Assembly	1	Y
28	RMQ604Z	Spring, Cassette Pressure	1	Y

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks	Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
29	XSN26+3FZ	Screw, Bracket(RMQ659Z) & Cassette Pressure Spring & Cassette Holder M'tg	4	Z	70	RME70A	Lead Holder, DC Motor Lead	1	Z
30	RMQ317A	Safety Lever	1	Y	71	RMQ620Z	Cushion, DC Motor	2	Z
31	RMQ318A	Spring, Safety Lever	1	Y	72	MHI5R2GD	DC Motor	1	OX
32	RMQ541Z	Lever Assembly, Auto-Stop Drive	1	Y	73	RMQ676Z	DC Motor Pulley	1	OY
33	RMQ542Z	Spring, Auto-Stop Drive Lever Assembly	1	Y	74	RMQ677Z	Belt, DC Motor	1	OX
34	RMQ516Z	Spacer, Auto-Stop Drive Lever Assembly	1	Z	75	ECEA16V100E	Electrolytic Capacitor	1	Y
35	XYN26+C5	Screw, Auto-Stop Drive Lever Assembly M'tg	1	Z	76	RMQ678Z	Leaf Switch	1	OX
36	RMQ656Z	Lever Assembly, Pause	1	OY	77	RMQ679Z	Rod, Leaf Switch	1	OZ
37	RMQ657Z	Spring, Lever Lock	1	OY	78	RMQ326A	Spring, Leaf Switch Rod	1	Y
38	RMQ658Z	Lever, Lever Lock	1	OY	79	RMQ680Z	Rewind Pulley Assembly	1	OX
39	RMQ320A	Spring, Memory Lock Lever & Pause Lever Assembly	2	OY	80	RMQ337A	Spring, Rewind Assembly	1	Y
40	XUC2FW	E Ring, Pause Lever Assembly & Auto-Stop Drive Pawl M'tg	4	Z	81	RMQ425Z	Lever, Eject	1	Y
41	RMQ659Z	Bracket, PC Board	1	OZ	82	RMQ681Z	Lever, Memory Lock	1	OY
42	RMQ423Z	Spring, Eject Lever	1	Y	83	RMQ682Z	Flywheel Assembly	1	OX
43	RMQ660Z	Bracket, Solenoid Assembly	1	OZ	83-1	Not Available, Order RMQ682Z	Flywheel Only	(1)	
44	XYN3+C6S	Screw, Solenoid Assembly M'tg	2	Z	83-2		Spring, Flywheel	(1)	
45	RMQ661Z	Solenoid Assembly with Plunger	1	OY	83-3	RMQ433Z	Washer, Flywheel	1	Z
45-1	Not Available, Order RMQ661Z	Solenoid & Plunger	(1)		83-4	RMQ530Z	Washer, Flywheel	1	Z
45-2		Spring, Plunger	(1)		83-5	RMQ526Z	Cam, Flywheel	1	Y
46	XYN26+C4	Screw, Bracket(RMQ660Z) & Button Mechanism Assembly & etc M'tg	9	Z	84	RMQ683Z	Retainer, Flywheel	1	OZ
47	RVD10D1	Diode	1	X	85	XYN3+F6S	Screw, Retainer(RMQ683Z) M'tg	2	Z
48	RMQ662Z	Button Mechanism Assembly with Button	1	OY	86	RMQ315A	Retainer, Cassette Tape	1	Z
49	RMQ663Z	Button, PAUSE, FF/CUE, PLAY REWIND, STOP/EJECT	5	OX	87	RMQ684Z	Pawl Assembly, Auto-Stop Drive	1	OY
50	RMQ664Z	Button, RECORD	1	OX	88	RMQ518Z	Spring, Auto-Stop Drive Pawl Assembly	1	Y
51	RMQ665Z	Lever Assembly, Record	1	OY	89	RMQ348A	Washer(Nylon), Idler Bracket	1	Z
52	RMQ666Z	Spring, Record Lever Assembly	1	OY	90	RMQ428Z	Bracket, Idler	1	Y
53	RMQ667Z	Lever Assembly, Rewind	1	OY	91	RMQ139A	Spring, Idler Bracket	1	Y
54	RMQ328A	Spring, Rewind Lever Assembly	1	Y	92	RMQ527Z	Washer, Idler	2	Z
55	RMQ668Z	Lever Assembly, Fast Forward	1	OY	93	RMQ353A	Idler	1	X
56	RMQ669Z	Spring, Fast Forward Lever Assembly	1	OY					
57	RMQ670Z	Lever, Review	1	OY					
58	RMQ671Z	Lever, Cue	1	OY					
59	RMQ672Z	Spring, Review & Cue Lever	1	OY					
60	XUC25FW	E Ring, Review & Cue Lever M'tg	2	Z					
61	RMQ673Z	Fast Forward Idler Assembly, Fast Forward	1	OY					
62	RMQ450Z	Washer, Fast Forward Idler Assembly	1	Z					
63	RMQ674Z	Leaf Switch	1	OX					
64	XSN26+5	Screw, Leaf Switch M'tg	2	Z					
65	RMQ675Z	Tape Counter	1	OZ					
66	XSS3-5S	Screw, Tape Counter M'tg	2	Z					
67	RMQ616Z	Screw, DC Motor M'tg	2	Z					
68	RMQ615Z	Spacer, DC Motor	2	Z					
69	RMQ171A	Rubber, DC Motor	2	Z					